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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/618,635	07/15/2003	Klaus R. Moeller	23390-000120/US	5657

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EXAMINER	
FAULK, DEVONA E	
ART UNIT	PAPER NUMBER
2615	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/618,635	MOELLER ET AL.	
	Examiner	Art Unit	
	Devona E. Faulk	2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 May 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *23-36 and 41-63* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *23-36 and 41-63* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *10/30/2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, filed 4/19/2007, with respect to the rejection(s) of claim(s) under 23-35 and 37-42 have been fully considered and are persuasive regarding the newly recited claim language. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of 112 1st rejections.

2. Applicant's arguments filed 4/19/07 , regarding prior art Cunningham, have been fully considered but they are not persuasive.

Regarding the applicant's assertion that prior art Cunningham distinguishes between intelligible sounds such as music and unintelligible sounds for masking unwanted sound, the examiner asserts that Cunningham clearly teaches of a sound masking package and further teaches of providing an audible output from the loudspeaker (see abstract). The examiner disagrees with the applicant's assertion that prior art Cunningham provides no suggesting of networking. Figure 5 of prior art Cunningham clearly illustrates a networking a plurality of masking units (column 6, lines 26-37).

3. . In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re*

Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Anderson teaches the deficiencies of Cunningham with respect to the claimed invention, and that one skilled in the art would have applied these teachings to Cunningham, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See In re Keller, 642 F.2d 413, 208 USPQ 871 (CCPA 1981

4. Claims 1-22,37-40 are cancelled.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 23-36,41-51,54-63 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 23 and dependent claims 24-36,41-43 recite " at least some of the sound masking units being responsive to a masking volume signal and at least some of the sound masking units being responsive to a masking frequency signal" and "the control

unit being configured to generate the masking frequency signal for controlling a frequency characteristic of the sound masking signal"..

Claim 35 recites "...the masking volume signal and the masking frequency signal for controlling the volume characteristic and the frequency characteristic, respectively...".

Claim 44 and dependent claims 45-51,recite " a plurality of sound masking units, some of said sound masking units including a communication interface for coupling said sound masking units to said communication network including a sound masking signal, a masking volume signal and a masking frequency signal and said some of the sound masking units including a processor for outputting said sound masking signal, and said processor including a component responsive to said masking volume signal for controlling the volume of said sound masking signal and a component responsive to said masking frequency signal for controlling the frequency of the masking signal".

Claim 54 and dependent claims 55 and 56, recite " wherein the plurality of control commands includes a masking frequency command".

Claim 57 and dependent clams 58-61 recite " ..a controller for receiving...one or more control signals from the interface..", and "said one or more control signal being intended for the networkable sound masking device and said one or more control signals comprising a masking volume signal or a masking frequency signal.... Said sound masking signal being responsive to said masking volume signal or said masking frequency signal".

Claim 62 and dependent claim 63, recites "...one or more control signals including said masking volume signal and said masking frequency signal...".

The specification discloses (pages 20 and 21 ,paragraph 0067) that that is a functional model 106 for adjusting the frequency spectrum of the audio signal output i.e. the sound masking signal or paging signal for one or more of the hubs. However, there is no disclosure of the some of the masking units being responsive to a masking frequency signal and of a controller receiving one or more control signals from the interface.. Furthermore the specification shows no differentiation between a masking volume signal and a masking frequency signal and no description as to how the sound masking units are responsive to a masking frequency signal.

The examiner asserts that this does not read on the various limitations as recited above. Therefore, the various limitations identified above all read on new matter.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 23-36,41-62 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 23-36 and 41-62 recite ".. a masking frequency signal..". The examiner is not clear as to what constitutes a masking frequency signal. Clarity is needed.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. Claims 52-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cunningham et al. (US 4185167) in view of Andersen et al. (US 5406634).

Regarding claim 52, Cunningham discloses controlling a plurality of sound masking units, said plurality of sound masking units being configured in a control communication network (Figs. 3 and 5; a plurality of sound masking units (M)(Fig. 5; column 6, lines 26-37) and receiving the sound masking signal addressed to one of said sound masking units; and outputting the received sound masking signal at the addressed sound masking unit. Cunningham teaches that the masking units may be connected together for simultaneous operation. It is obvious that monitoring of the masking units would occur.

Cunningham fails to discloses a method for selectively controlling a plurality of sound masking units and receiving a plurality of control commands over said control communication network, said method comprising controlling characteristics of the sound masking signal based on the one or more commands received at the sound masking unit.

Anderson discloses an intelligent speaker unit for speaker system network comprising a plurality of speaker units (i.e. sound masking units), wherein the plurality of speaker units are controlled by control data transmitted to the plurality of speaker units over a control channel (column 2, lines 43-54); and a control unit (Fig. 1; column 2, lines 55-64; column 3, lines 33-62) configured to generate the control signals to selectively control operation of the plurality of speaker units, and configured to send the control signals over the communication network (Fig. 1; column 2, lines 20-68; column 3, lines 33-62) in order to allow an operator to remotely control the plurality of speaker units, which provide ease of adjusting a plurality of parameters such as volume, speaker equalization, and sound delay at a desired time; to receive status and/or control information from the speaker unit; and to provide more flexibility in a speaker system network by allowing an operator to transmit a message to only selected speakers in a network, or in multiple networks or zones, rather than all speakers in a network or zone (Figs. 1 and 7; column 2, lines 20-68; column 3, lines 33-62).

Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Cunningham with the teaching of Anderson to incorporate the functions of a intelligent speaker unit for use in a speaker network system (such as the speaker network system of Cunningham)(Cunningham, Fig. 5) in order to allow an operator to remotely control the plurality of speaker units (i.e. sound masking units),which provide ease of adjusting a plurality of parameters such as volume, speaker equalization, and sound delay at a desired time; to receive status and/or control information from the speaker unit; and to provide more flexibility in a speaker system network by allowing an operator to transmit a message to only

selected speakers in a network, or in multiple networks or zones, rather than all speakers in a network or zone. Therefore Cunningham as modified discloses each sound masking signal generator configured to generate and output a sound masking signal (Cunningham, Fig. 3; column 4, lines 1-18) based on a control signal received over the communication network (i.e. the sound masking package of Cunningham receives control data from the control unit of Anderson in order for each sound masking signal generator of Cunningham to be remotely controlled by the control unit of Anderson in order for each sound masking signal generator configured to generate and output a sound masking signal based on a control signal received over the communication network) (Cunningham, Fig. 5; Anderson, column 3, lines 56-62); and a control unit configured to generate the control signals to selectively control operation of the plurality of sound masking units, and configured to send the control signals over the communication network (Anderson, Figs. 1 and 7; column 2, lines 20-68; column 3, lines 33-62).

All elements of claim 53 are comprehended by the rejection of claim 52.

Claim Objections

11. Claim 57 objected to because of the following informalities: The last line of claim 57 ends with a semicolon. If this is correct than something is missing from the claim, if it is not correct than it should end with a period. Appropriate correction is required.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Devona E. Faulk whose telephone number is 571-272-7515. The examiner can normally be reached on 8 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DEF

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8/6/07